

WHAT IS CLAIMED IS:

1. A recording apparatus for attaching, to binary data, meta-data as information related to the binary data, characterized by comprising:

5 meta-data generation means for generating the meta-data;

binary data generation means for generating the binary data to which the meta-data is to be attached; and

10 meta-data attaching means for attaching the meta-data to a plurality of binary data generated by said binary data generation means to generate binary data having meta-data.

2. The recording apparatus according to claim 1, characterized by further comprising storage means for
15 storing the binary data having meta-data outputed by said meta-data attaching means.

3. The recording apparatus according to claim 1, characterized by further comprising binary data having meta-data write means for writing the binary data having
20 meta-data outputed by said meta-data attaching means in a detachable storage medium or external device.

4. The recording apparatus according to claim 2, characterized by further comprising binary data having meta-data write means for writing the binary data having
25 meta-data stored in said storage means in a detachable storage medium or external device.

5. The recording apparatus according to claim 1,
characterized in that

25 said apparatus further comprises meta-data loading
means for loading meta-data stored in advance in a
detachable storage medium or external device, and

30 said meta-data attaching means attaches the
meta-data loaded by said meta-data loading means to the
binary data to generate the binary data having meta-data.

10 6. The recording apparatus according to claim 1,
characterized in that

35 said apparatus further comprises binary data loading
means for loading binary data stored in a first detachable
storage medium or external device, and

15 40 said meta-data attaching means attaches the
meta-data to the binary data loaded by said binary data
loading means to generate the binary data having meta-data.

45 7. The recording apparatus according to claim 6,
characterized by further comprising binary-data having
meta-data write means for writing the binary data having
20 meta-data outputted by said meta-data attaching means in the
first storage medium as a loading source of the binary data.

50 8. The recording apparatus according to claim 6,
characterized by further comprising binary-data having
meta-data write means for writing the binary data having
25 meta-data stored in said storage means in the first storage
medium as a loading source of the binary data.

9. The recording apparatus according to claim 1, characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data.

10. The recording apparatus according to claim 1, characterized in that said meta-data attaching means attaches only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

10 11. A recording method of attaching, to binary data, meta-data as information related to the binary data, characterized by comprising:

a meta-data generation step of generating the meta-data;

15 a binary data generation step of generating the binary data to which the meta-data is to be attached; and

a meta-data attaching step of attaching the same meta-data to a plurality of binary data generated in the binary data generation step to generate binary data having meta-data.

12. The recording method according to claim 11, characterized by further comprising the storage step of storing the binary data having meta-data outputted by the meta-data attaching step.

25 13. The recording method according to claim 12, characterized by further comprising the binary data having

meta-data write step of writing the binary data having meta-data outputed by the meta-data attaching step in a detachable storage medium or external device.

14. The recording method according to claim 12, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a detachable storage medium or external device.

15. The recording method according to claim 11, characterized in that

said recording method further comprises the meta-data loading step of loading meta-data stored in advance in a detachable storage medium or external device, and

the meta-data attaching step comprises attaching the meta-data loaded in the meta-data loading step to the binary data to generate the binary data having meta-data.

16. The recording method according to claim 11, further characterized in that

the recording method further comprises binary data loading step of loading the binary data stored in a first detachable storage medium or external device, and

the meta-data attaching step comprises attaching the meta-data to the binary data loaded in the binary data loading step to generate the binary data having meta-data.

17. The recording method according to claim 16,

characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data outputed by the meta-data attaching step in the first detachable storage medium as a loading source of the binary data.

18. The recording method according to claim 16, characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first detachable storage medium as a loading source of the binary data.

19. The recording method according to claim 11, characterized in that the meta-data attaching step comprises embedding the meta-data to a predetermined position of the binary data.

20. The recording method according to claim 11, characterized in that the meta-data attaching step comprises attaching only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

21. A storage medium which stores a processing program for attaching, to binary data, meta-data as information related to the binary data, the processing program comprising:

a meta-data generation step of generating the meta-data;

a binary data generation step of generating the

binary data to which the meta-data is to be attached; and
a meta-data attaching step of attaching the same
meta-data to a plurality of binary data generated in the
binary data generation step to generate binary data having
meta-data.

22. A recording apparatus for attaching, to binary data,
meta-data as information related to the binary data,
characterized by comprising:

meta-data generation means for generating the
10 meta-data;

binary data loading means for loading the binary data
to which the meta-data is to be attached from a first
detachable storage medium or external device; and

meta-data attaching means for attaching the same
15 meta-data to a plurality of binary data loaded by said
binary data loading means to generate binary data having
meta-data.

23. The recording apparatus according to claim 22,
characterized by further comprising storage means for
20 storing the binary data having meta-data outputted by said
meta-data attaching means.

24. The recording apparatus according to claim 22,
characterized by further comprising binary data having
meta-data write means for writing the binary data having
25 meta-data output from said meta-data attaching means in the
first detachable storage medium or external device as a

loading source of the binary data.

25. The recording apparatus according to claim 22,
characterized by further comprising binary data having
meta-data write means for writing the binary data having
meta-data output from said meta-data attaching means in a
second detachable storage medium or external device
different from a loading source of the binary data.

26. The recording apparatus according to claim 23,
characterized by further comprising binary data having
meta-data write means for writing the binary data having
meta-data stored in said storage means in the first storage
medium as a loading source of the binary data.

27. The recording apparatus according to claim 23,
characterized by further comprising binary data having
meta-data write means for writing the binary data having
meta-data stored in said storage means in a second
detachable storage medium or external device different from
a loading source of the binary data.

28. The recording apparatus according to claim 22,
further characterized in that

said recording apparatus further comprises loading
means for loading meta-data stored, in advance, in a
detachable storage medium or external device, and

said meta-data attaching means attaches the
meta-data loaded by said meta-data loading means to the
binary data.

29. The recording apparatus according to claim 22, characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data.

30. The recording apparatus according to claim 22, characterized in that said meta-data attaching means attaches only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

31. A recording method of attaching, to binary data, meta-data as information related to the binary data, characterized by comprising:

a meta-data generation step of generating the meta-data;

a binary data loading step of loading the binary data to which the meta-data is to be attached from a first detachable storage medium or external device; and

a meta-data attaching step of attaching the same meta-data to a plurality of binary data loaded in the binary data loading step to generate binary data having meta-data.

32. The recording method according to claim 31, characterized by further comprising a storage step of storing the binary data having meta-data output in the meta-data attaching step.

33. The recording method according to claim 31, characterized by further comprising a binary-data having

meta-data write step of writing a binary data having meta-data outputed by the meta-data attaching step in the first storage medium as a loading source of the binary data.

34. The recording method according to claim 31, characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data outputed by the meta-data attaching step in a second detachable storage medium or external device different from a loading source of the binary data.

35. The recording method according to claim 32, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first detachable storage medium as a loading source of the binary data.

36. The recording method according to claim 32, characterized by further comprising binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a second detachable storage medium or external device different from a loading source of the binary data.

37. The recording method according to claim 31, characterized in that

the recording method further comprises a loading step of loading meta-data stored, in advance, in a detachable storage medium or external device, and

the meta-data attaching step comprises attaching the

meta-data loaded in the meta-data loading step to the binary data.

38. The recording method according to claim 31, characterized in that the meta-data attaching step
5 comprises embedding the meta-data to a predetermined position of the binary data.

39. The recording method according to claim 31, characterized in that the meta-data attaching step
10 comprises attaching only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

40. A storage medium which stores a processing program for attaching, to binary data, meta-data as information related to the binary data, the processing program
15 comprising:

a meta-data generation step of generating the meta-data;

a binary data loading step of loading the binary data to which the meta-data is to be attached from a first
20 detachable storage medium or external device; and

a meta-data attaching step of attaching the same meta-data to a plurality of binary data loaded in the binary data loading step to generate binary data having meta-data.

41. A recording apparatus for attaching, to binary data,
25 meta-data as information related to the binary data, characterized by comprising:

meta-data loading means for loading the meta-data from a first detachable storage medium or external device;

binary data generation means for generating the binary data; and

meta-data attaching means for attaching the same meta-data loaded by said meta-data loading means to a plurality of binary data generated by said binary data generation means to generate binary data having meta-data.

42. The recording apparatus according to claim 41, characterized by further comprising storage means for storing the binary data having meta-data outputted by said meta-data attaching means.

43. The recording apparatus according to claim 41, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output from said meta-data attaching means in the first storage medium or external device as a loading source of the meta-data.

44. The recording apparatus according to claim 41, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data outputted by said meta-data attaching means in a second detachable storage medium or external device different from a loading source of the binary data.

45. The recording apparatus according to claim 41, characterized by further comprising binary-data having

meta-data write means for writing the binary data having meta-data stored in said storage means in the first detachable storage medium as a loading source of the meta-data.

5 46. The recording apparatus according to claim 41, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data stored in said storage means in a second detachable storage medium or external device different from
10 a loading source of the meta-data.

47. The recording apparatus according to claim 41, characterized in that

said apparatus further comprises binary data loading means for loading binary data stored in advance in a
15 detachable storage medium or external device, and

said meta-data attaching means attaches the meta-data loaded by said meta-data loading means to the binary data to generate the binary data having meta-data.

48. The recording apparatus according to claim 41,
20 characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data.

49. The recording apparatus according to claim 41, characterized in that said meta-data attaching means
25 attaches only information representing a file name of the meta-data or a location of the meta-data to a predetermined

position of the binary data.

50. A recording method of attaching, to binary data, meta-data as information related to the binary data, characterized by comprising:

5 a meta-data-loading step of loading the meta-data from a first detachable storage medium or external device;
a binary data loading step of loading the binary data from the first detachable storage medium or external device; and

10 a meta-data attaching step of attaching the same meta-data loaded in the meta-data loading step to a plurality of binary data loaded in the binary data loading step to generate binary data having meta-data.

51. The recording method according to claim 50,
15 characterized by further comprising the storage step of storing the binary data having meta-data outputted by the meta-data attaching step.

52. The recording method according to claim 50, characterized by further comprising the binary data having
20 meta-data write step of writing the binary data having meta-data outputted by the meta-data attaching step in the first storage medium or external device as a loading source of the binary data.

53. The recording method according to claim 50,
25 characterized by further comprising the binary data having meta-data write step of writing the binary data having

meta-data outputed by the meta-data attaching step in a second detachable storage medium or external device different from a loading source of the binary data.

54. The recording method according to claim 50, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first storage medium as a loading source of the binary data.

55. The recording method according to claim 50, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a second detachable storage medium or external device different from a loading source of the binary data.

56. The recording method according to claim 50, characterized in that

said method further comprises the binary data loading step of loading binary data stored, in advance, in a detachable storage medium or external device, and

the meta-data attaching step comprises attaching the meta-data loaded in the meta-data loading step to the binary data to generate the binary data having meta-data.

57. The recording method according to claim 50, characterized in that the meta-data attaching step comprises embedding the meta-data to a predetermined position of the binary data.

58. The recording method according to claim 50,
characterized in that the meta-data attaching step
comprises attaching only information representing a file
name of the meta-data or a location of the meta-data to a
predetermined position of the binary data.

59. A storage medium which stores a processing program
for attaching, to binary data, meta-data as information
related to the binary data, the processing program
comprising:

10 a meta-data loading step of loading the meta-data
from a first detachable storage medium or external device;

a binary data loading step of loading the binary data
from the first detachable storage medium or external
device; and

15 a meta-data attaching step of attaching the same
meta-data loaded in the meta-data loading step to a
plurality of binary data loaded in the binary data loading
step to generate binary data having meta-data.